

Name: \_\_\_\_\_ Period: \_\_\_\_\_ Date: \_\_\_\_\_

### Compound Interest Practice Worksheet

**Directions:** Use the formula  $A = P \left(1 + \frac{r}{n}\right)^{nt}$  where  $A$  represents the total amount,  $P$  represents the principle,  $r$  represents the interest rate as a decimal,  $n$  represents the number of times per year interest is compounded, and  $t$  represents the time in years to answer the questions below.

1. A coin had a value of \$1.17 in 1995. Its value has been increasing at 9% per year. What is the value after 5 years?
2. Gina deposited \$1500 in an account that pays 4% interest compounded quarterly. What will the balance be in 2 years?
3. The Garcias have \$12,000 in a savings account. The bank pays 3.5% interest on savings accounts, compounded monthly. Find the total balance after three years.
4. The Fresh and Green Company has a savings plan for employees. If an employee makes an initial deposit of \$1000, the company pays 8% interest compounded quarterly. If an employee withdraws the money after five years, how much is in the account?
5. Mr. and Mrs. Boyce bought a house for \$96,000 in 1995. Real estate values in their area increase approximately 4% each year. What was the value of the house in 2007? What is the value of the house in 2012?
6. Determine the final account balance of an investment if \$300 is invested at an interest rate of 6.75% compounded semiannually for 20 years.
7. The Greens bought a condo for \$110,000 in 2005. If its value appreciates at 6% per year, what will the value be in 2012?